

Map Unit Description (MN)

Fillmore County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

1010--Pits, quarry

Pits, quarry

Extent: 100 percent of the unit

Landform(s): hills, valley sides

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

1054--Udorthents, loamy (abandoned iron mine), 0 to 25 percent slopes

Udorthents, loamy

Extent: 70 to 99 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 25 percent

Parent material: loamy material

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: well drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Fillmore County, Minnesota

Aa--Alluvial land, medium textured, poorly drained

Alluvial land, medium textured, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: frequent

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 28 in	silt loam		moderate	6.15 to 6.71 in	6.1 to 7.8
AC --	28 to 39 in	silt loam		moderate	1.87 to 2.43 in	6.1 to 7.8
C --	39 to 60 in	silt loam		moderate	3.13 to 4.17 in	6.1 to 8.4

Ab--Alluvial land, medium textured, well drained

Alluvial land, medium textured, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 26 in	silt loam		moderate	5.46 to 5.98 in	6.6 to 8.4
C --	26 to 60 in	silty clay loam		moderate	6.43 to 7.11 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ac--Alluvial land, coarse textured, well drained

Alluvial land, coarse textured, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loamy fine sand		rapid	0.79 to 0.94 in	5.6 to 7.8
AC --	8 to 40 in	loamy sand		rapid	3.23 to 3.87 in	5.6 to 7.8
C1 --	40 to 50 in	sand		rapid	0.59 to 1.08 in	6.1 to 7.8
C2 --	50 to 60 in	sand		rapid	0.20 to 0.69 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ca--Chaseburg and Judson silt loams, 0 to 1 percent slopes

Chaseburg, frequently flooded

Extent: 45 percent of the unit

Landform(s): drainageways

Slope gradient: 0 to 1 percent

Parent material: alluvium and/or colluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	6.1 to 7.8
C --	10 to 60 in	silt loam		moderate	9.00 to 11.00 in	5.6 to 7.8

Judson, frequently flooded

Extent: 45 percent of the unit

Landform(s): drainageways

Slope gradient: 0 to 1 percent

Parent material: alluvium and/or colluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 25 in	silt loam		moderate	5.29 to 5.80 in	5.6 to 7.3
A --	25 to 48 in	silty clay loam		moderate	4.80 to 5.25 in	5.6 to 7.3
C --	48 to 60 in	silt loam		moderate	2.48 to 2.72 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Cb--Chaseburg and Judson silt loams, 2 to 6 percent slopes

Chaseburg, very rarely flooded

Extent: 45 percent of the unit

Landform(s): drainageways

Slope gradient: 2 to 6 percent

Parent material: alluvium and/or colluvium

Restrictive feature(s): greater than 60 inches

Flooding: very rare

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	6.1 to 7.8
C --	10 to 60 in	silt loam		moderate	9.00 to 11.00 in	5.6 to 7.8

Judson, very rarely flooded

Extent: 45 percent of the unit

Landform(s): drainageways

Slope gradient: 2 to 6 percent

Parent material: alluvium and/or colluvium

Restrictive feature(s): greater than 60 inches

Flooding: very rare

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 25 in	silt loam		moderate	5.29 to 5.80 in	5.6 to 7.3
A --	25 to 48 in	silty clay loam		moderate	4.80 to 5.25 in	5.6 to 7.3
C --	48 to 72 in	silt loam		moderate	5.04 to 5.52 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Cc--Chelsea and Boone loamy fine sands, 2 to 6 percent slopes

Chelsea

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: eolian sands

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:			Texture	Permeability	Available water capacity	pH
A --	0 to 8 in	loamy fine sand		rapid	0.79 to 1.18 in	5.6 to 7.3
E&Bt --	8 to 60 in	fine sand		rapid	3.12 to 4.16 in	5.1 to 6.5

Boone

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: sandy residuum

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:			Texture	Permeability	Available water capacity	pH
A --	0 to 3 in	loamy fine sand		rapid	0.31 to 0.41 in	3.5 to 7.3
B --	3 to 10 in	loamy fine sand		rapid	0.20 to 0.80 in	3.5 to 7.3
C --	10 to 30 in	fine sand		rapid	0.40 to 2.21 in	4.5 to 6.5
2R --	30 to 60 in	weathered bedrock		moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

Cd--Chelsea and Boone loamy fine sands, 7 to 11 percent slopes

Chelsea

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: eolian sands

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loamy fine sand		rapid	0.79 to 1.18 in	5.6 to 7.3
E&Bt --	8 to 60 in	fine sand		rapid	3.12 to 4.16 in	5.1 to 6.5

Boone

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: sandy residuum

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 3 in	loamy fine sand		rapid	0.31 to 0.41 in	3.5 to 7.3
B --	3 to 10 in	sand		rapid	0.20 to 0.80 in	3.5 to 7.3
C --	10 to 30 in	fine sand		rapid	0.40 to 2.21 in	4.5 to 6.5
2R --	30 to 60 in	weathered bedrock		moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

Ce--Chelsea and Boone loamy fine sands, 12 to 17 percent slopes

Chelsea

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: eolian sands

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loamy fine sand		rapid	0.79 to 1.18 in	5.6 to 7.3
E&Bt --	8 to 60 in	fine sand		rapid	3.12 to 4.16 in	5.1 to 6.5

Boone

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: sandy residuum

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 3 in	loamy fine sand		rapid	0.31 to 0.41 in	3.5 to 7.3
B --	3 to 10 in	sand		rapid	0.20 to 0.80 in	3.5 to 7.3
C --	10 to 30 in	fine sand		rapid	0.40 to 2.21 in	4.5 to 6.5
2R --	30 to 60 in	weathered bedrock		moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

Cf--Chelsea and Boone loamy fine sands, 18 to 35 percent slopes

Chelsea

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 35 percent

Parent material: eolian sands

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:			Texture	Permeability	Available water capacity	pH
A --	0 to 8 in	loamy fine sand		rapid	0.79 to 1.18 in	5.6 to 7.3
E&Bt --	8 to 60 in	fine sand		rapid	3.12 to 4.16 in	5.1 to 6.5

Boone

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 35 percent

Parent material: sandy residuum

Restrictive feature(s): paralithic bedrock at 40 to 70 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:			Texture	Permeability	Available water capacity	pH
A --	0 to 16 in	loamy fine sand		rapid	1.61 to 2.26 in	3.5 to 7.3
B --	16 to 42 in	sand		rapid	1.04 to 2.08 in	3.5 to 7.3
2R --	42 to 60 in	weathered bedrock		moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

Cg--Clyde silty clay loam

Clyde

Extent: 85 percent of the unit

Landform(s): flats

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 18 in	silty clay loam	moderate	3.80 to 4.17 in	6.1 to 7.3
Bg --	18 to 25 in	clay loam	moderate	1.28 to 1.42 in	6.1 to 7.3
2Cg1 --	25 to 44 in	gravelly sandy loam	moderately rapid	1.51 to 2.46 in	6.1 to 7.3
2Cg2 --	44 to 60 in	sandy clay loam	moderate	2.68 to 2.99 in	6.6 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Ch--Clyde silty clay loam, overwash

Clyde, overwash

Extent: 85 percent of the unit

Landform(s): flats

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 24 in	silty clay loam	moderate	5.04 to 5.52 in	6.1 to 7.3
Bg -- 24 to 40 in	silty clay loam	moderate	2.91 to 3.23 in	6.1 to 7.3
Cg1 -- 40 to 50 in	sandy loam	moderately rapid	0.79 to 1.28 in	6.1 to 7.3
2Cg2 -- 50 to 60 in	sandy clay loam	moderate	1.67 to 1.87 in	6.6 to 8.4

Da--Dakota fine sandy loam, 0 to 1 percent slopes

Dakota

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 13 in	fine sandy loam	moderately rapid	1.56 to 1.95 in	5.6 to 7.3
Bt1 -- 13 to 28 in	loam	moderately rapid	2.24 to 2.84 in	5.1 to 6.0
2Bt2 -- 28 to 60 in	sand	very rapid	0.64 to 1.91 in	5.1 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Db--Dakota fine sandy loam, 2 to 6 percent slopes

Dakota

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 13 in	fine sandy loam	moderately rapid	1.56 to 1.95 in	5.6 to 7.3
Bt1 -- 13 to 28 in	loam	moderately rapid	2.24 to 2.84 in	5.1 to 6.0
2Bt2 -- 28 to 60 in	gravelly coarse sand	very rapid	0.64 to 1.91 in	5.1 to 6.5

Dd--Dakota fine sandy loam, 12 to 17 percent slopes, moderately eroded

Dakota, moderately eroded

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 12 to 17 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	fine sandy loam	moderately rapid	0.71 to 0.89 in	5.6 to 7.3
Bt1 -- 6 to 13 in	sandy loam	moderately rapid	0.71 to 0.85 in	4.5 to 6.0
2Bt2 -- 13 to 28 in	gravelly loamy sand	very rapid	0.30 to 0.60 in	4.5 to 6.0
2C -- 28 to 60 in	gravelly loamy sand	very rapid	0.64 to 1.28 in	4.5 to 6.0

Map Unit Description (MN)

Fillmore County, Minnesota

De--Dakota loam, 0 to 1 percent slopes

Dakota

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 14 in	loam	moderate	2.83 to 3.12 in	5.1 to 7.3
Bt1 --	14 to 27 in	loam	moderate	1.89 to 2.39 in	5.1 to 7.3
2Bt2 --	27 to 36 in	sandy loam	moderately rapid	0.18 to 1.27 in	5.1 to 7.3
2C --	36 to 60 in	gravelly coarse sand	rapid	0.48 to 2.40 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Df--Dakota loam, 2 to 6 percent slopes

Dakota

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 14 in	loam	moderate	2.83 to 3.12 in	5.1 to 7.3
Bt1 --	14 to 27 in	loam	moderate	1.89 to 2.39 in	5.1 to 7.3
2Bt2 --	27 to 36 in	sandy loam	moderately rapid	0.18 to 1.27 in	5.1 to 7.3
2C --	36 to 60 in	gravelly coarse sand	rapid	0.48 to 2.40 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Dg--Dickinson fine sandy loam, 0 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	fine sandy loam	moderately rapid	1.09 to 1.36 in	5.6 to 7.3
Bw --	9 to 30 in	fine sandy loam	moderately rapid	2.50 to 3.13 in	5.1 to 6.5
BC --	30 to 36 in	loamy fine sand	rapid	0.47 to 0.59 in	5.1 to 6.5
C --	36 to 60 in	fine sand	rapid	0.48 to 0.96 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Dh--Dickinson fine sandy loam, 2 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	fine sandy loam	moderately rapid	1.09 to 1.36 in	5.6 to 7.3
Bw --	9 to 30 in	fine sandy loam	moderately rapid	2.50 to 3.13 in	5.1 to 6.5
BC --	30 to 36 in	loamy fine sand	rapid	0.47 to 0.59 in	5.1 to 6.5
C --	36 to 60 in	fine sand	rapid	0.48 to 0.96 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Dk--Dickinson fine sandy loam, 7 to 11 percent slopes, moderately eroded

Dickinson, moderately eroded

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 11 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	fine sandy loam	moderately rapid	1.09 to 1.36 in	5.6 to 7.3
Bw --	9 to 30 in	fine sandy loam	moderately rapid	2.50 to 3.13 in	5.1 to 6.5
BC --	30 to 36 in	loamy sand	rapid	0.47 to 0.59 in	5.1 to 6.5
C --	36 to 60 in	sand	rapid	0.48 to 0.96 in	5.6 to 7.3

DI--Dickinson fine sandy loam, loamy substratum, 2 to 6 percent slopes

Dickinson, loamy substratum

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 20 in	fine sandy loam	moderately rapid	2.41 to 3.01 in	5.6 to 7.3
Bw --	20 to 42 in	fine sandy loam	rapid	1.76 to 2.20 in	5.1 to 6.0
C --	42 to 60 in	loam	moderate	3.01 to 3.37 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Dn--Dickinson fine sandy loam, loamy substratum, 7 to 11 percent slopes, moderately eroded

Dickinson, loamy substratum, moderately eroded

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 11 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 20 in	fine sandy loam	moderately rapid	2.41 to 3.01 in	5.6 to 7.3
Bw --	20 to 42 in	fine sandy loam	rapid	1.76 to 2.20 in	5.1 to 6.0
C --	42 to 60 in	loam	moderate	3.01 to 3.37 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Do--Dickinson loam, 2 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam		moderately rapid	1.09 to 1.36 in	5.6 to 7.3
Bw --	9 to 30 in	fine sandy loam		moderately rapid	2.50 to 3.13 in	5.1 to 6.5
BC --	30 to 36 in	loamy fine sand		rapid	0.47 to 0.59 in	5.1 to 6.5
C --	36 to 60 in	fine sand		rapid	0.48 to 0.96 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Dr--Dickinson loam, 7 to 11 percent slopes, moderately eroded

Dickinson, moderately eroded

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 11 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam		moderately rapid	1.09 to 1.36 in	5.6 to 7.3
Bw --	9 to 20 in	fine sandy loam		moderately rapid	1.32 to 1.65 in	5.6 to 7.3
BC --	20 to 30 in	fine sandy loam		moderately rapid	1.18 to 1.48 in	5.1 to 6.5
C1 --	30 to 36 in	loamy fine sand		rapid	0.47 to 0.59 in	5.1 to 6.5
C2 --	36 to 60 in	sand		rapid	0.48 to 0.96 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Ds--Dubuque and Whalan silt loams, 2 to 6 percent slopes

Dubuque

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loess over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 30 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 3 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 7.3
E --	3 to 12 in	silt loam	moderate	1.56 to 1.73 in	5.1 to 6.0
Bt1 --	12 to 20 in	silty clay loam	slow	0.99 to 1.24 in	5.1 to 6.0
2Bt2 --	20 to 30 in	clay	slow	1.18 to 1.48 in	5.1 to 6.0
3R --	30 to 34 in	unweathered bedrock	impermeable		

Whalan

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loess over till over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 7.3
Bt1 --	12 to 22 in	loam	moderate	1.74 to 1.94 in	5.1 to 6.5
2Bt2 --	22 to 24 in	silty clay	moderately slow	0.30 to 0.37 in	5.6 to 7.8
3R --	24 to 34 in	weathered bedrock	rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

Du--Dubuque and Whalan silt loams, 7 to 11 percent slopes, moderately eroded

Dubuque, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: loess over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 30 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 3 in	silt loam		moderate	0.63 to 0.69 in	5.1 to 7.3
E --	3 to 12 in	silt loam		moderate	1.56 to 1.73 in	5.1 to 6.0
Bt1 --	12 to 20 in	silty clay loam		slow	0.99 to 1.24 in	5.1 to 6.0
2Bt2 --	20 to 30 in	clay		slow	1.18 to 1.48 in	5.1 to 6.0
3R --	30 to 34 in	unweathered bedrock		impermeable		

Whalan, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: loess over till over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam		moderate	2.60 to 2.83 in	5.6 to 7.3
Bt1 --	12 to 22 in	loam		moderate	1.74 to 1.94 in	5.1 to 6.5
2Bt2 --	22 to 24 in	silty clay		moderately slow	0.30 to 0.37 in	5.6 to 7.8
3R --	24 to 34 in	weathered bedrock		rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

Dv--Dubuque and Whalan silt loams, 12 to 17 percent slopes, moderately eroded

Dubuque, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: loess over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 30 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 3 in	silt loam		moderate	0.63 to 0.69 in	5.1 to 7.3
E --	3 to 12 in	silt loam		moderate	1.56 to 1.73 in	5.1 to 6.0
Bt1 --	12 to 20 in	silty clay loam		slow	0.99 to 1.24 in	5.1 to 6.0
2Bt2 --	20 to 30 in	clay		slow	1.18 to 1.48 in	5.1 to 6.0
3R --	30 to 34 in	unweathered bedrock		impermeable		

Whalan, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: loess over till over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam		moderate	2.60 to 2.83 in	5.6 to 7.3
Bt1 --	12 to 22 in	clay loam		moderate	1.74 to 1.94 in	5.1 to 6.5
2Bt2 --	22 to 24 in	clay loam		moderately slow	0.30 to 0.37 in	5.6 to 7.8
3R --	24 to 34 in	weathered bedrock		rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

Dx--Dubuque and Whalan silt loams, 18 to 45 percent slopes

Dubuque

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 45 percent

Parent material: loess over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 30 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 3 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 7.3
E --	3 to 12 in	silt loam	moderate	1.56 to 1.73 in	5.1 to 6.0
Bt1 --	12 to 20 in	clay	slow	0.99 to 1.24 in	5.1 to 6.0
2Bt2 --	20 to 30 in	clay	slow	1.18 to 1.48 in	5.1 to 6.0
3R --	30 to 34 in	unweathered bedrock	impermeable		

Whalan

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 45 percent

Parent material: loess over till over limestone residuum

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 7.3
Bt1 --	12 to 22 in	clay loam	moderate	1.74 to 1.94 in	5.1 to 6.5
2Bt2 --	22 to 24 in	clay loam	moderately slow	0.30 to 0.37 in	5.6 to 7.8
3R --	24 to 34 in	weathered bedrock	rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

Ea--Escarpments

Escarpments

Extent: 90 percent of the unit

Landform(s): hills

Slope gradient: 12 to 50 percent

Parent material: loess over limestone residuum and/or sandstone residuum

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loamy sand	rapid	0.71 to 0.94 in	5.1 to 7.3
B -- 8 to 48 in	loamy sand	rapid	1.61 to 2.81 in	4.5 to 6.5
C -- 48 to 60 in	sand	rapid	0.35 to 0.83 in	4.5 to 6.5

Fa--Fayette silt loam, 0 to 1 percent slopes

Fayette

Extent: 85 percent of the unit

Landform(s): loess hills

Slope gradient: 0 to 1 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 14 in	silt loam	moderate	2.83 to 3.12 in	5.1 to 7.3
Bt -- 14 to 53 in	silt loam	moderate	7.02 to 7.80 in	4.5 to 6.5
C -- 53 to 60 in	silt loam	moderate	1.20 to 1.34 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Fb--Fayette silt loam, 2 to 6 percent slopes

Fayette

Extent: 85 percent of the unit

Landform(s): loess hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam		moderate	2.36 to 2.60 in	5.1 to 7.3
Bt --	12 to 53 in	silt loam		moderate	7.44 to 8.27 in	4.5 to 6.5
C --	53 to 60 in	silt loam		moderate	1.20 to 1.34 in	5.1 to 7.8

Fd--Fayette silt loam, 7 to 11 percent slopes, moderately eroded

Fayette, moderately eroded

Extent: 85 percent of the unit

Landform(s): loess hills

Slope gradient: 7 to 11 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	silt loam		moderate	1.42 to 1.57 in	5.1 to 7.3
Bt --	8 to 40 in	silt loam		moderate	5.81 to 6.46 in	4.5 to 6.0
C --	40 to 60 in	silt loam		moderate	3.54 to 3.94 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ff--Fayette silt loam, 12 to 17 percent slopes, moderately eroded

Fayette, moderately eroded

Extent: 85 percent of the unit

Landform(s): loess hills

Slope gradient: 12 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	silt loam		moderate	1.42 to 1.57 in	5.1 to 7.3
Bt --	8 to 40 in	silt loam		moderate	5.81 to 6.46 in	4.5 to 6.0
C --	40 to 60 in	silt loam		moderate	3.54 to 3.94 in	5.1 to 7.8

Fh--Fayette silt loam, 18 to 45 percent slopes

Fayette

Extent: 85 percent of the unit

Landform(s): loess hills

Slope gradient: 18 to 45 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	silt loam		moderate	1.57 to 1.73 in	5.1 to 7.3
Bt --	8 to 40 in	silt loam		moderate	5.81 to 6.46 in	4.5 to 6.5
C --	40 to 60 in	silt loam		moderate	3.54 to 3.94 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Fk--Fayette silt loam, terrace, 2 to 6 percent slopes

Fayette, terrace

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam		moderate	2.36 to 2.60 in	5.1 to 7.3
Bt --	12 to 53 in	silt loam		moderate	7.44 to 8.27 in	4.5 to 6.5
C --	53 to 60 in	silt loam		moderate	1.20 to 1.34 in	5.1 to 7.8

Fm--Fayette silt loam, terrace, 7 to 17 percent slopes, moderately eroded

Fayette, terrace, moderately eroded

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	silt loam		moderate	2.13 to 2.36 in	5.1 to 7.3
Bt --	12 to 53 in	silt loam		moderate	7.44 to 8.27 in	4.5 to 6.0
C --	53 to 60 in	silt loam		moderate	1.20 to 1.34 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Fn--Floyd and Clyde silty clay loams, overwash, 0 to 3 percent slopes

Floyd, overwash

Extent: 45 percent of the unit

Landform(s): flats

Slope gradient: 0 to 3 percent

Parent material: silty alluvium over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 16 in	silty clay loam	moderate	3.39 to 3.71 in	6.6 to 7.3
Bw -- 16 to 32 in	silty clay loam	moderate	2.83 to 3.15 in	6.1 to 7.3
2C -- 32 to 60 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.8

Clyde, overwash

Extent: 45 percent of the unit

Landform(s): flats

Slope gradient: 0 to 3 percent

Parent material: silty alluvium over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 16 in	silty clay loam	moderate	3.39 to 3.71 in	6.6 to 7.3
Bw -- 16 to 32 in	silt loam	moderate	2.83 to 3.15 in	6.1 to 7.3
2C -- 32 to 60 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

GP--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 45 to 55 percent of the unit

Landform(s): stream terraces, outwash plains, eskers, moraines

Slope gradient: 0 to 50 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Udipsamments

Extent: 40 to 50 percent of the unit

Landform(s): stream terraces, outwash plains, eskers, moraines

Slope gradient: 0 to 25 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: excessively drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Fillmore County, Minnesota

Ha--Hixton fine sandy loam, 2 to 11 percent slopes, moderately eroded

Hixton, moderately eroded

Extent: 85 percent of the unit

Landform(s): hills

Slope gradient: 2 to 11 percent

Parent material: loess over sandstone residuum and/or shale residuum

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 14 in	fine sandy loam	moderate	1.84 to 2.13 in	5.1 to 7.3
Bt --	14 to 32 in	sandy loam	moderate	2.13 to 3.37 in	5.1 to 6.0
C --	32 to 45 in	sandy loam	moderate	1.04 to 2.34 in	5.1 to 6.0
2R --	45 to 60 in	loamy fine sand	rapid	0.45 to 1.05 in	5.1 to 6.0

Map Unit Description (MN)

Fillmore County, Minnesota

Hb--Hixton fine sandy loam, 12 to 35 percent slopes, moderately eroded

Hixton, moderately eroded

Extent: 85 percent of the unit

Landform(s): hills

Slope gradient: 12 to 35 percent

Parent material: loess over sandstone residuum and/or shale residuum

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 14 in	fine sandy loam	moderate	1.84 to 2.13 in	5.1 to 7.3
Bt --	14 to 32 in	sandy loam	moderate	2.13 to 3.37 in	5.1 to 6.0
C --	32 to 45 in	sandy loam	moderate	1.04 to 2.34 in	5.1 to 6.0
2R --	45 to 60 in	loamy fine sand	rapid	0.45 to 1.05 in	5.1 to 6.0

Map Unit Description (MN)

Fillmore County, Minnesota

Ka--Kasson silt loam, 0 to 1 percent slopes

Kasson

Extent: 85 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 6.5
Bt --	9 to 24 in	silt loam		moderate	2.69 to 3.29 in	4.5 to 6.0
2C --	24 to 60 in	loam		moderately slow	5.37 to 6.81 in	5.1 to 7.3

Kb--Kasson silt loam, 2 to 6 percent slopes

Kasson

Extent: 85 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 6.5
Bt --	9 to 24 in	silt loam		moderate	2.69 to 3.29 in	4.5 to 6.0
2C --	24 to 60 in	loam		moderately slow	5.37 to 6.81 in	5.1 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Kc--Kato silty clay loam

Kato

Extent: 85 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	silty clay loam	moderate	1.77 to 2.36 in	6.1 to 7.8
Bg --	10 to 35 in	silty clay loam	moderate	4.54 to 5.54 in	5.1 to 7.3
Cg --	35 to 60 in	coarse sand	rapid	0.50 to 1.74 in	6.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Kd--Kenyon silt loam, 0 to 1 percent slopes

Kenyon

Extent: 85 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.81 to 1.99 in	5.1 to 7.3
A --	9 to 14 in	silt loam		moderate	1.02 to 1.13 in	5.1 to 7.3
AB --	14 to 19 in	silt loam		moderate	0.94 to 1.04 in	5.1 to 7.3
2Bw1 --	19 to 41 in	loam		moderate	3.75 to 4.19 in	5.1 to 7.3
2Bw2 --	41 to 55 in	loam		moderate	2.41 to 2.69 in	5.1 to 7.3
2BC1 --	55 to 71 in	loam		moderate	2.68 to 2.99 in	6.1 to 8.4
2BC2 --	71 to 79 in	loam		moderate	1.34 to 1.50 in	6.1 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Ke--Kenyon silt loam, 2 to 6 percent slopes

Kenyon

Extent: 85 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.81 to 1.99 in	5.1 to 7.3
A --	9 to 14 in	silt loam		moderate	1.02 to 1.13 in	5.1 to 7.3
AB --	14 to 19 in	silt loam		moderate	0.94 to 1.04 in	5.1 to 7.3
2Bw1 --	19 to 41 in	loam		moderate	3.75 to 4.19 in	5.1 to 7.3
2Bw2 --	41 to 55 in	loam		moderate	2.41 to 2.69 in	5.1 to 7.3
2BC1 --	55 to 71 in	loam		moderate	2.68 to 2.99 in	6.1 to 8.4
2BC2 --	71 to 79 in	loam		moderate	1.34 to 1.50 in	6.1 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

La--Lindstrom silt loam, 2 to 6 percent slopes

Lindstrom

Extent: 95 percent of the unit

Landform(s): valley sides

Slope gradient: 2 to 6 percent

Parent material: loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 9 in	silt loam		moderate	1.81 to 1.99 in	5.6 to 7.3
Bw --	9 to 29 in	silt loam		moderate	4.42 to 5.22 in	5.6 to 7.3
C --	29 to 60 in	silt loam		moderate	6.14 to 6.76 in	5.6 to 7.3

Lb--Lindstrom silt loam, 7 to 11 percent slopes, moderately eroded

Lindstrom, moderately eroded

Extent: 95 percent of the unit

Landform(s): valley sides

Slope gradient: 7 to 11 percent

Parent material: loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 9 in	silt loam		moderate	1.63 to 1.81 in	5.6 to 7.3
Bw --	9 to 29 in	silt loam		moderate	4.42 to 5.22 in	5.6 to 7.3
C1 --	29 to 60 in	silt loam		moderate	6.14 to 6.76 in	5.6 to 7.3
C2 --	60 to 70 in	loam		moderate	1.74 to 1.94 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Lc--Lindstrom silt loam, 11 to 17 percent slopes, moderately eroded

Lindstrom, moderately eroded

Extent: 95 percent of the unit

Landform(s): valley sides

Slope gradient: 11 to 17 percent

Parent material: loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 9 in		silt loam	moderate	1.63 to 1.81 in	5.6 to 7.3
Bw --	9 to 29 in		silt loam	moderate	4.42 to 5.22 in	5.6 to 7.3
C1 --	29 to 60 in		silt loam	moderate	6.14 to 6.76 in	5.6 to 7.3
C2 --	60 to 70 in		loam	moderate	1.74 to 1.94 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ld--Lindstrom fine sandy loam, 18 to 45 percent slopes

Lindstrom

Extent: 95 percent of the unit

Landform(s): valley sides

Slope gradient: 18 to 45 percent

Parent material: loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	fine sandy loam	moderately rapid	1.28 to 1.57 in	5.1 to 7.3
Bw --	10 to 24 in	fine sandy loam	moderately rapid	1.70 to 1.98 in	4.5 to 6.5
C1 --	24 to 50 in	silt loam	moderate	5.20 to 5.72 in	4.5 to 6.5
C2 --	50 to 60 in	fine sandy loam	rapid	0.79 to 1.38 in	6.1 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

M501A--Klossner muck, depressional, 0 to 1 percent slopes

Klossner, depressional

Extent: 70 to 90 percent of the unit

Landform(s): depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over loamy deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oap --	0 to 10 in	muck	moderately rapid	3.44 to 4.72 in	5.6 to 6.0
Oa --	10 to 26 in	muck	moderately rapid	5.65 to 7.75 in	5.6 to 6.0
2A1 --	26 to 36 in	mucky silty clay loam	moderate	2.17 to 2.56 in	6.6 to 7.3
2A2 --	36 to 48 in	silty clay loam	moderate	2.20 to 2.69 in	6.6 to 7.3
2Cg --	48 to 80 in	loam	moderate	4.78 to 6.06 in	7.4 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

M541C2--Copaston loam, 6 to 12 percent slopes, moderately eroded

Copaston, moderately eroded

Extent: 55 to 85 percent of the unit

Landform(s): hills

Slope gradient: 6 to 12 percent

Parent material: loamy sediments over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
AB --	7 to 11 in	fine sandy loam	moderately rapid	0.59 to 0.75 in	5.6 to 7.3
Bw --	11 to 18 in	sandy loam	moderately rapid	0.78 to 1.35 in	5.6 to 7.3
2R --	18 to 60 in	unweathered bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

M541F--Copaston loam, 14 to 45 percent slopes

Copaston

Extent: 45 to 85 percent of the unit

Landform(s): valley sides

Slope gradient: 14 to 45 percent

Parent material: loamy sediments over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
AB --	7 to 11 in	fine sandy loam	moderately rapid	0.59 to 0.75 in	5.6 to 7.3
Bw --	11 to 18 in	sandy loam	moderately rapid	0.78 to 1.35 in	5.6 to 7.3
2R --	18 to 60 in	unweathered bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Ma--Marshan silty clay loam

Marshan

Extent: 90 percent of the unit

Landform(s): drainageways

Slope gradient: 0 to 1 percent

Parent material: silty alluvium over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 14 in	silty clay loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bg1 --	14 to 23 in	silty clay loam	moderate	1.47 to 1.91 in	5.6 to 7.3
Bg2 --	23 to 30 in	loam	moderate	1.06 to 1.35 in	5.6 to 7.3
2Cg --	30 to 60 in	sand	rapid	0.60 to 1.50 in	6.1 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Mc--Meridian fine sandy loam, 2 to 6 percent slopes

Meridian

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: sandy and silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	fine sandy loam	moderate	1.28 to 1.77 in	6.1 to 7.8
Bt1 --	10 to 15 in	loam	moderate	0.82 to 0.97 in	5.1 to 6.5
2Bt2 --	15 to 29 in	sandy loam	moderately rapid	1.28 to 1.98 in	5.1 to 6.5
2C --	29 to 60 in	sand	rapid	1.54 to 3.07 in	5.1 to 6.5

Md--Mixed alluvial land, 0 to 6 percent slopes

Mixed alluvial land, frequently flooded, ponded

Extent: 95 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 6 percent

Parent material: sandy and silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: frequent

Drainage class: poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Fillmore County, Minnesota

Me--Mixed alluvial land, 7 to 17 percent slopes

Mixed alluvial land, very rarely flooded

Extent: 95 percent of the unit

Landform(s): flood plains

Slope gradient: 7 to 17 percent

Parent material: sandy and silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: very rare

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

N502B--Nordness silt loam, 2 to 6 percent slopes

Nordness

Extent: 50 to 85 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loamy or silty material over clayey residuum
over limestone or dolomite

Restrictive feature(s): lithic bedrock at 8 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

A --	0 to 4 in	silt loam	moderate	0.79 to 0.87 in	5.6 to 7.3
BE --	4 to 7 in	silt loam	moderate	0.63 to 0.69 in	5.6 to 7.3
Bt1 --	7 to 13 in	silt loam	moderate	1.18 to 1.30 in	5.6 to 7.3
2Bt2 --	13 to 16 in	clay	slow	0.38 to 0.47 in	6.6 to 7.3
3R --	16 to 80 in	bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

N502C--Nordness silt loam, 6 to 12 percent slopes

Nordness

Extent: 50 to 85 percent of the unit

Landform(s): hills

Slope gradient: 6 to 12 percent

Parent material: loamy or silty material over clayey residuum over limestone or dolomite

Restrictive feature(s): lithic bedrock at 8 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in		silt loam	moderate	0.79 to 0.87 in	5.6 to 7.3
BE --	4 to 7 in		silt loam	moderate	0.63 to 0.69 in	5.6 to 7.3
Bt1 --	7 to 13 in		silt loam	moderate	1.18 to 1.30 in	5.6 to 7.3
2Bt2 --	13 to 16 in		clay	slow	0.38 to 0.47 in	6.6 to 7.3
3R --	16 to 80 in		bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

N509F--Bellechester-Etter complex, 18 to 45 percent slopes

Bellechester

Extent: 30 to 70 percent of the unit

Landform(s): valley sides

Slope gradient: 18 to 45 percent

Parent material: sandy colluvium and/or residuum

Restrictive feature(s): paralithic bedrock at 36 to 71 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	sandy loam	moderately rapid	1.42 to 1.65 in	6.1 to 7.8
Bw -- 12 to 19 in	loamy sand	rapid	0.71 to 0.99 in	5.6 to 7.8
C -- 19 to 36 in	fine sand	rapid	0.68 to 1.69 in	5.6 to 7.8
Cr -- 36 to 80 in	weathered bedrock	moderate		

Etter

Extent: 15 to 50 percent of the unit

Landform(s): valley sides

Slope gradient: 18 to 35 percent

Parent material: mixed loess and erosional sediments and the underlying sandstone residuum

Restrictive feature(s): paralithic bedrock at 35 to 80 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 16 in	sandy loam	moderate	2.58 to 2.91 in	5.6 to 7.3
Bw -- 16 to 31 in	sandy loam	moderate	1.80 to 2.84 in	4.5 to 7.3
2C -- 31 to 35 in	fine sand	rapid	0.20 to 0.39 in	4.5 to 8.4
2Cr -- 35 to 80 in	fine sand	moderate	2.24 to 4.49 in	4.5 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

N510E--Sylvester-Downs complex, 20 to 45 percent slopes

Sylvester

Extent: 40 to 85 percent of the unit

Landform(s): valley sides

Slope gradient: 20 to 45 percent

Parent material: loess over residuum over sandstone bedrock

Restrictive feature(s): paralithic bedrock at 24 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 15 in	silt loam	moderate	3.29 to 3.59 in	5.6 to 7.3
Bt -- 15 to 30 in	silty clay loam	moderate	2.99 to 3.29 in	5.1 to 6.5
2BC -- 30 to 32 in	loamy sand	moderately rapid	0.16 to 0.28 in	5.1 to 6.5
2Cr -- 32 to 60 in	weathered bedrock	moderate		

Downs

Extent: 15 to 55 percent of the unit

Landform(s): valley sides

Slope gradient: 20 to 30 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.6 to 7.3
Bt -- 9 to 52 in	silt loam	moderate	8.58 to 9.44 in	5.1 to 6.5
BC -- 52 to 80 in	silt loam	moderate	5.59 to 6.15 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

N531B--Downs-Nasset complex, sinkhole karst, 2 to 6 percent slopes

Downs, sinkhole karst

Extent: 65 to 90 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.6 to 7.3
E, BE -- 8 to 17 in	silt loam	moderate	1.81 to 1.99 in	5.6 to 7.3
Bt -- 17 to 39 in	silty clay loam	moderate	4.41 to 4.85 in	5.1 to 6.5
BC, C -- 39 to 60 in	silt loam	moderate	4.17 to 4.59 in	5.1 to 7.8

Nasset, sinkhole karst

Extent: 5 to 20 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loess over clayey residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	silt loam	moderate	1.30 to 1.42 in	5.6 to 7.3
BE -- 6 to 12 in	silt loam	moderate	1.18 to 1.30 in	5.6 to 7.3
Bt -- 12 to 37 in	silty clay loam	moderate	5.04 to 5.54 in	5.1 to 6.5
2Bt -- 37 to 44 in	clay	slow	0.57 to 0.85 in	6.6 to 7.3
3R -- 44 to 60 in	weathered bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

N532C2--Fayette-Pepin complex, sinkhole karst, 6 to 12 percent slopes, moderately eroded

Fayette, sinkhole karst, moderately eroded

Extent: 40 to 90 percent of the unit

Landform(s): hills

Slope gradient: 6 to 12 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 7.3
Bt --	9 to 50 in	silty clay loam		moderate	8.19 to 9.01 in	5.1 to 6.5
BC --	50 to 80 in	silt loam		moderate	5.98 to 6.58 in	5.1 to 7.8

Pepin, sinkhole karst, moderately eroded

Extent: 5 to 30 percent of the unit

Landform(s): hills

Slope gradient: 6 to 12 percent

Parent material: loess over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 40 to 80 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .49

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 7.3
Bt --	9 to 48 in	silt loam		moderate	7.80 to 8.57 in	5.1 to 6.5
2Bt --	48 to 58 in	clay		slow	0.79 to 1.57 in	5.6 to 7.3
3Bt --	58 to 66 in	very flaggy loam		moderate	0.50 to 1.32 in	5.6 to 7.8
3R --	66 to 80 in	weathered bedrock		rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

N533D2--Fayette-Pepin-Dubuque complex, sinkhole karst, 12 to 18 percent slopes, moderately eroded

Fayette, sinkhole karst, moderately eroded

Extent: 15 to 50 percent of the unit

Landform(s): hills

Slope gradient: 12 to 18 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 7.3
Bt --	9 to 50 in	silty clay loam		moderate	8.19 to 9.01 in	5.1 to 6.5
BC --	50 to 80 in	silt loam		moderate	5.98 to 6.58 in	5.1 to 7.8

Pepin, sinkhole karst, moderately eroded

Extent: 15 to 40 percent of the unit

Landform(s): hills

Slope gradient: 12 to 18 percent

Parent material: loess over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 40 to 80 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .49

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	silt loam		moderate	1.99 to 2.17 in	5.6 to 7.3
Bt --	9 to 48 in	silt loam		moderate	7.80 to 8.57 in	5.1 to 6.5
2Bt --	48 to 58 in	clay		slow	0.79 to 1.57 in	5.6 to 7.3
3Bt --	58 to 66 in	very flaggy loam		moderate	0.50 to 1.32 in	5.6 to 7.8
3R --	66 to 80 in	weathered bedrock		rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

N533D2--Fayette-Pepin-Dubuque complex, sinkhole karst, 12 to 18 percent slopes, moderately eroded

Dubuque, sinkhole karst, moderately eroded

Extent: 15 to 30 percent of the unit

Landform(s): -- error in exists on --

Slope gradient: 12 to 18 percent

Parent material: loess over clayey residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.6 to 7.3
Bt --	8 to 29 in	silty clay loam	moderate	4.25 to 4.68 in	5.6 to 7.3
2Bt --	29 to 30 in	clay	slow	0.06 to 0.09 in	6.1 to 7.3
3R --	30 to 80 in	weathered bedrock	rapid		

Map Unit Description (MN)

Fillmore County, Minnesota

N580G--Brodale, very flaggy-Bellechester-Rock outcrop complex, 45 to 90 percent slopes

Brodale, very flaggy

Extent: 20 to 70 percent of the unit

Landform(s): valley sides

Slope gradient: 45 to 90 percent

Parent material: loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .10

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	very flaggy loam	moderate	0.83 to 1.77 in	6.6 to 8.4
C --	12 to 60 in	very flaggy loam	moderately rapid	1.92 to 7.20 in	7.4 to 8.4

Bellechester

Extent: 15 to 30 percent of the unit

Landform(s): valley sides

Slope gradient: 45 to 90 percent

Parent material: sandy colluvium and/or residuum

Restrictive feature(s): paralithic bedrock at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .05

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 16 in	sand	rapid	0.81 to 1.29 in	6.1 to 8.4
Bw1,Bw2,BC --	16 to 42 in	sand	rapid	0.78 to 2.60 in	6.6 to 8.4
Cr --	42 to 60 in	weathered bedrock	moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

N580G--Brodale, very flaggy-Bellechester-Rock outcrop complex, 45 to 90 percent slopes

Rock outcrop

Extent: 5 to 15 percent of the unit

Landform(s): valley sides

Slope gradient:

Parent material:

Restrictive feature(s): lithic bedrock

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated: 8

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Fillmore County, Minnesota

N638G--Brodale, flaggy-Bellechester complex, 30 to 70 percent slopes

Brodale, flaggy

Extent: 20 to 75 percent of the unit

Landform(s): valley sides

Slope gradient: 30 to 70 percent

Parent material: loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 12 in	channery loam	moderate	1.54 to 2.01 in	6.6 to 8.4
C --	12 to 60 in	very flaggy loam	moderately rapid	3.36 to 7.20 in	7.4 to 8.4

Bellechester

Extent: 15 to 30 percent of the unit

Landform(s): valley sides

Slope gradient: 30 to 70 percent

Parent material: sandy colluvium and/or residuum

Restrictive feature(s): paralithic bedrock at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 16 in	loamy sand	rapid	1.61 to 2.26 in	6.1 to 7.8
Bw,BC --	16 to 42 in	sand	rapid	1.04 to 2.08 in	6.6 to 8.4
Cr --	42 to 60 in	weathered bedrock	moderate		

Map Unit Description (MN)

Fillmore County, Minnesota

N639F--Frontenac-Lacrescent complex, 20 to 45 percent slopes

Frontenac

Extent: 20 to 85 percent of the unit

Landform(s): valley sides

Slope gradient: 20 to 45 percent

Parent material: loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 7.3
Bw -- 12 to 30 in	silt loam	moderate	3.08 to 3.98 in	5.6 to 7.3
2C -- 30 to 80 in	very channery loam	moderately rapid	3.00 to 8.00 in	6.6 to 7.8

Lacrescent

Extent: 15 to 60 percent of the unit

Landform(s): valley sides

Slope gradient: 20 to 45 percent

Parent material: silty and loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silt loam	moderate	2.17 to 2.36 in	6.1 to 7.3
AB -- 10 to 17 in	channery silt loam	moderate	1.20 to 1.35 in	6.1 to 7.3
2Bw -- 17 to 28 in	very channery silt loam	moderately rapid	0.77 to 1.76 in	6.1 to 7.3
2C -- 28 to 60 in	very channery silt loam	moderately rapid	2.23 to 5.10 in	7.4 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

N639G--Frontenac-Lacrescent complex, 30 to 70 percent slopes

Frontenac

Extent: 20 to 85 percent of the unit

Landform(s): valley sides

Slope gradient: 30 to 70 percent

Parent material: loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 7.3
Bw -- 12 to 30 in	silt loam	moderate	3.08 to 3.98 in	5.6 to 7.3
2C -- 30 to 80 in	very channery loam	moderately rapid	3.00 to 8.00 in	6.6 to 7.8

Lacrescent

Extent: 15 to 60 percent of the unit

Landform(s): valley sides

Slope gradient: 30 to 70 percent

Parent material: silty and loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silt loam	moderate	2.17 to 2.36 in	6.1 to 7.3
AB -- 10 to 17 in	channery silt loam	moderate	1.20 to 1.35 in	6.1 to 7.3
2Bw -- 17 to 28 in	very channery silt loam	moderately rapid	0.77 to 1.76 in	6.1 to 7.3
2C -- 28 to 60 in	very channery silt loam	moderately rapid	2.23 to 5.10 in	7.4 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

N640G--Lacrescent, flaggy-Frontenac-Rock outcrop complex, 45 to 90 percent slopes

Lacrescent, flaggy

Extent: 20 to 80 percent of the unit

Landform(s): valley sides

Slope gradient: 45 to 90 percent

Parent material: silty and loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .17

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 17 in	flaggy silt loam	moderate	3.05 to 3.72 in	6.6 to 7.3
2Bw -- 17 to 28 in	very channery silt loam	moderately rapid	0.88 to 1.65 in	6.1 to 7.3
2C -- 28 to 60 in	very channery silt loam	moderately rapid	2.23 to 5.10 in	7.4 to 7.8

Frontenac

Extent: 15 to 45 percent of the unit

Landform(s): valley sides

Slope gradient: 45 to 90 percent

Parent material: loamy sediments over loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 7.3
Bw -- 12 to 30 in	silt loam	moderate	3.08 to 3.98 in	5.6 to 7.3
2C -- 30 to 80 in	very channery loam	moderately rapid	3.00 to 8.00 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

N640G--Lacrescent, flaggy-Frontenac-Rock outcrop complex, 45 to 90 percent slopes

Rock outcrop

Extent: 5 to 15 percent of the unit

Landform(s): valley sides

Slope gradient:

Parent material:

Restrictive feature(s): lithic bedrock

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated: 8

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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N641F--Brodale channery loam, 20 to 45 percent slopes

Brodale, flaggy

Extent: 55 to 85 percent of the unit

Landform(s): valley sides

Slope gradient: 20 to 45 percent

Parent material: loamy-skeletal colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	flaggy loam	moderate	1.54 to 2.01 in	6.6 to 8.4
C -- 12 to 60 in	very flaggy loam	moderately rapid	3.36 to 7.20 in	7.4 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Pa--Plainfield and Sparta loamy fine sands, 2 to 6 percent slopes

Plainfield

Extent: 45 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loamy fine sand	rapid	0.71 to 0.94 in	5.1 to 7.3
Bw --	8 to 48 in	loamy sand	rapid	1.61 to 2.81 in	4.5 to 6.5
C --	48 to 60 in	fine sand	rapid	0.35 to 0.83 in	4.5 to 6.5

Sparta

Extent: 45 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 15 in	loamy fine sand	moderately rapid	1.35 to 1.80 in	5.1 to 7.3
Bw --	15 to 34 in	loamy fine sand	rapid	0.94 to 2.08 in	5.1 to 7.3
E&Bt --	34 to 60 in	sand	rapid	1.04 to 1.82 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Pb--Plainfield and Sparta loamy fine sands, 7 to 11 percent slopes

Plainfield

Extent: 45 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 11 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loamy fine sand	rapid	0.71 to 0.94 in	5.1 to 7.3
Bw --	8 to 48 in	loamy sand	rapid	1.61 to 2.81 in	4.5 to 6.5
C --	48 to 60 in	fine sand	rapid	0.35 to 0.83 in	4.5 to 6.5

Sparta

Extent: 45 percent of the unit

Landform(s): terraces

Slope gradient: 7 to 11 percent

Parent material: eolian deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 15 in	loamy fine sand	moderately rapid	1.35 to 1.80 in	5.1 to 7.3
Bw --	15 to 34 in	loamy fine sand	rapid	0.94 to 2.08 in	5.1 to 7.3
E&Bt --	34 to 60 in	sand	rapid	1.04 to 1.82 in	5.1 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ra--Racine and Ostrander silt loams, 0 to 1 percent slopes

Racine

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 12 in	silt loam		moderate	2.60 to 2.83 in	5.1 to 7.3
Bt1 --	12 to 18 in	silt loam		moderate	1.26 to 1.39 in	4.5 to 6.0
2Bt2 --	18 to 46 in	clay loam		moderate	4.19 to 5.31 in	4.5 to 6.0
2C --	46 to 60 in	clay loam		moderately slow	1.38 to 2.07 in	6.6 to 8.4

Ostrander

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 16 in	silt loam		moderate	3.23 to 3.87 in	5.6 to 7.3
Bt1 --	16 to 20 in	silt loam		moderate	0.67 to 0.79 in	5.1 to 7.3
2Bt2 --	20 to 50 in	loam		moderate	5.09 to 5.69 in	5.1 to 7.3
3C --	50 to 60 in	loam		moderate	1.67 to 1.87 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Rb--Racine and Ostrander silt loams, 2 to 6 percent slopes

Racine

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 12 in	silt loam		moderate	2.60 to 2.83 in	5.1 to 7.3
Bt1 --	12 to 18 in	silt loam		moderate	1.26 to 1.39 in	4.5 to 6.0
2Bt2 --	18 to 46 in	clay loam		moderate	4.19 to 5.31 in	4.5 to 6.0
2C --	46 to 60 in	clay loam		moderately slow	1.38 to 2.07 in	6.6 to 8.4

Ostrander

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 16 in	silt loam		moderate	3.23 to 3.87 in	5.6 to 7.3
Bt1 --	16 to 20 in	silt loam		moderate	0.67 to 0.79 in	5.1 to 7.3
2Bt2 --	20 to 50 in	loam		moderate	5.09 to 5.69 in	5.1 to 7.3
3C --	50 to 60 in	loam		moderate	1.67 to 1.87 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Rd--Racine and Ostrander silt loams, 7 to 11 percent slopes, moderately eroded

Racine, moderately eroded

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 11 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 12 in	silt loam		moderate	2.60 to 2.83 in	5.1 to 7.3
Bt1 --	12 to 18 in	silt loam		moderate	1.26 to 1.39 in	4.5 to 6.0
2Bt2 --	18 to 46 in	clay loam		moderate	4.19 to 5.31 in	4.5 to 6.0
2C --	46 to 60 in	clay loam		moderately slow	1.38 to 2.07 in	6.6 to 8.4

Ostrander, moderately eroded

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 11 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 16 in	silt loam		moderate	3.23 to 3.87 in	5.6 to 7.3
Bt1 --	16 to 20 in	silt loam		moderate	0.67 to 0.79 in	5.1 to 7.3
2Bt2 --	20 to 50 in	loam		moderate	5.09 to 5.69 in	5.1 to 7.3
3C --	50 to 60 in	loam		moderate	1.67 to 1.87 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Re--Racine and Ostrander loams, 12 to 17 percent slopes, moderately eroded

Racine, moderately eroded

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 12 to 17 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 12 in	loam		moderate	2.60 to 2.83 in	5.1 to 7.3
Bt1 --	12 to 18 in	silt loam		moderate	1.26 to 1.39 in	4.5 to 6.0
2Bt2 --	18 to 46 in	clay loam		moderate	4.19 to 5.31 in	4.5 to 6.0
2C --	46 to 60 in	clay loam		moderately slow	1.38 to 2.07 in	6.6 to 8.4

Ostrander, moderately eroded

Extent: 40 percent of the unit

Landform(s): till plains

Slope gradient: 12 to 17 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 16 in	loam		moderate	3.55 to 3.87 in	5.1 to 7.3
Bt1 --	16 to 20 in	silt loam		moderate	0.67 to 0.79 in	5.1 to 7.3
2Bt2 --	20 to 50 in	loam		moderate	5.09 to 5.69 in	5.1 to 7.3
3C --	50 to 60 in	loam		moderate	1.67 to 1.87 in	6.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Rf--Renova silt loam, 0 to 1 percent slopes

Renova

Extent: 90 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.6 to 6.5
Bt1 --	10 to 24 in	silty clay loam	moderate	2.83 to 3.12 in	4.5 to 6.0
2Bt2 --	24 to 52 in	clay loam	moderate	4.75 to 5.31 in	4.5 to 7.3
2C --	52 to 60 in	loam	moderately slow	0.79 to 1.18 in	7.4 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Rg--Renova silt loam, 2 to 6 percent slopes

Renova

Extent: 90 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	5.6 to 6.5
Bt1 --	10 to 24 in	silty clay loam		moderate	2.83 to 3.12 in	4.5 to 6.0
2Bt2 --	24 to 52 in	clay loam		moderate	4.75 to 5.31 in	4.5 to 7.3
2C --	52 to 60 in	loam		moderately slow	0.79 to 1.18 in	7.4 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Rk--Renova silt loam, 7 to 11 percent slopes, moderately eroded

Renova, moderately eroded

Extent: 90 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 11 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	5.6 to 6.5
Bt1 --	10 to 24 in	silty clay loam		moderate	2.83 to 3.12 in	4.5 to 6.0
2Bt2 --	24 to 52 in	clay loam		moderate	4.75 to 5.31 in	4.5 to 7.3
2C --	52 to 60 in	loam		moderately slow	0.79 to 1.18 in	7.4 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

RI--Renova loam, 12 to 17 percent slopes, moderately eroded

Renova, moderately eroded

Extent: 90 percent of the unit

Landform(s): till plains

Slope gradient: 12 to 17 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	loam		moderate	2.17 to 2.36 in	5.6 to 6.5
Bt1 --	10 to 24 in	silty clay loam		moderate	2.83 to 3.12 in	4.5 to 6.0
2Bt2 --	24 to 52 in	clay loam		moderate	4.75 to 5.31 in	4.5 to 7.3
2C --	52 to 60 in	loam		moderately slow	0.79 to 1.18 in	7.4 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Rm--Rockton and Dodgeville silt loams, shallow, 2 to 6 percent slopes

Dodgeville

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.13 to 1.28 in	6.6 to 8.4
Bt --	7 to 16 in	silt loam	moderate	1.36 to 1.99 in	6.1 to 8.4
2R --	16 to 60 in	bedrock	moderately rapid		7.9 to 8.4

Rockton

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.06 to 1.63 in	6.1 to 8.4
Bt --	7 to 18 in	silt loam	moderate	1.65 to 2.43 in	6.1 to 8.4
2R --	18 to 60 in	unweathered bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Ro--Rockton and Dodgeville silt loams, shallow, 7 to 11 percent slopes, moderately eroded

Dodgeville, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam		moderate	1.13 to 1.28 in	6.6 to 8.4
Bt --	7 to 16 in	silt loam		moderate	1.36 to 1.99 in	6.1 to 8.4
2R --	16 to 60 in	bedrock		moderately rapid		7.9 to 8.4

Rockton, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam		moderate	1.06 to 1.63 in	6.1 to 8.4
Bt --	7 to 18 in	silt loam		moderate	1.65 to 2.43 in	6.1 to 8.4
2R --	18 to 60 in	unweathered bedrock		moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Rp--Rockton and Dodgeville silt loams, shallow, 12 to 17 percent slopes, moderately eroded

Dodgeville, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam		moderate	1.13 to 1.28 in	6.6 to 8.4
Bt --	7 to 16 in	silt loam		moderate	1.36 to 1.99 in	6.1 to 8.4
2R --	16 to 60 in	bedrock		moderately rapid		7.9 to 8.4

Rockton, moderately eroded

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam		moderate	1.06 to 1.63 in	6.1 to 8.4
Bt --	7 to 18 in	silt loam		moderate	1.65 to 2.43 in	6.1 to 8.4
2R --	18 to 60 in	unweathered bedrock		moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Rr--Rockton and Dodgeville silt loams, shallow, 18 to 35 percent slopes

Dodgeville

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 35 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.13 to 1.28 in	6.6 to 8.4
Bt --	7 to 16 in	silt loam	moderate	1.36 to 1.99 in	6.1 to 8.4
2R --	16 to 60 in	bedrock	moderately rapid		7.9 to 8.4

Rockton

Extent: 45 percent of the unit

Landform(s): hills

Slope gradient: 18 to 30 percent

Parent material: loamy sediments over residuum over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.06 to 1.63 in	6.1 to 8.4
Bt --	7 to 18 in	silt loam	moderate	1.65 to 2.43 in	6.1 to 8.4
2R --	18 to 60 in	unweathered bedrock	moderately slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Sa--Schapville silty clay loam, 2 to 6 percent slopes

Schapville

Extent: 90 percent of the unit

Landform(s): hills

Slope gradient: 2 to 6 percent

Parent material: loess over residuum over shale bedrock

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 17 in	silty clay loam	moderate	3.39 to 4.06 in	5.6 to 7.3
Bt1 --	17 to 26 in	silty clay loam	moderately slow	1.63 to 1.99 in	5.6 to 7.3
2Bt2 --	26 to 37 in	silty clay	slow	1.32 to 1.76 in	6.1 to 7.8
3Cr --	37 to 60 in	weathered bedrock	slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Sb--Schapville silty clay loam, 7 to 11 percent slopes, moderately eroded

Schapville, moderately eroded

Extent: 90 percent of the unit

Landform(s): hills

Slope gradient: 7 to 11 percent

Parent material: loess over residuum over shale bedrock

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silty clay loam	moderate	1.42 to 1.57 in	5.6 to 7.3
Bt1 --	8 to 22 in	silty clay loam	moderate	2.55 to 2.83 in	5.6 to 7.3
2Bt2 --	22 to 25 in	silty clay	slow	0.25 to 0.31 in	5.6 to 7.3
3Cr --	25 to 60 in	weathered bedrock	slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Sc--Schapville silty clay loam, 12 to 17 percent slopes, moderately eroded

Schapville, moderately eroded

Extent: 90 percent of the unit

Landform(s): hills

Slope gradient: 12 to 17 percent

Parent material: loess over residuum over shale bedrock

Restrictive feature(s): paralithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silty clay loam	moderate	1.42 to 1.57 in	5.6 to 7.3
Bt1 --	8 to 22 in	silty clay loam	moderate	2.55 to 2.83 in	5.6 to 7.3
2Bt2 --	22 to 25 in	silty clay	slow	0.25 to 0.31 in	5.6 to 7.3
3Cr --	25 to 60 in	weathered bedrock	slow		

Map Unit Description (MN)

Fillmore County, Minnesota

Sd--Seaton and Port Byron silt loams, 2 to 6 percent slopes

Seaton

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silt loam		moderate	1.73 to 1.89 in	5.6 to 7.3
Bt --	8 to 30 in	silt loam		moderate	4.41 to 4.85 in	4.5 to 7.3
C --	30 to 60 in	silt loam		moderate	5.98 to 6.58 in	5.6 to 8.4

Port Byron

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	5.1 to 8.4
Bw --	10 to 26 in	silt loam		moderate	3.23 to 3.55 in	5.6 to 7.3
C --	26 to 60 in	silt loam		moderate	6.77 to 7.45 in	5.6 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Se--Seaton and Port Byron silt loams, 7 to 11 percent slopes, moderately eroded

Seaton, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 7 to 11 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silt loam		moderate	1.73 to 1.89 in	5.6 to 7.3
Bt --	8 to 30 in	silt loam		moderate	4.41 to 4.85 in	4.5 to 7.3
C --	30 to 60 in	silt loam		moderate	5.98 to 6.58 in	5.6 to 8.4

Port Byron, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 7 to 11 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam		moderate	2.17 to 2.36 in	5.1 to 8.4
Bw --	10 to 26 in	silt loam		moderate	3.23 to 3.55 in	5.6 to 7.3
C --	26 to 60 in	silt loam		moderate	6.77 to 7.45 in	5.6 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Sf--Seaton and Port Byron silt loams, 12 to 17 percent slopes, moderately eroded

Seaton, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 12 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.6 to 7.3
Bt -- 8 to 30 in	silt loam	moderate	4.41 to 4.85 in	4.5 to 7.3
C -- 30 to 60 in	silt loam	moderate	5.98 to 6.58 in	5.6 to 8.4

Port Byron, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 12 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.1 to 8.4
Bw -- 10 to 26 in	silt loam	moderate	3.23 to 3.55 in	5.6 to 7.3
C -- 26 to 60 in	silt loam	moderate	6.77 to 7.45 in	5.6 to 8.4

Map Unit Description (MN)

Fillmore County, Minnesota

Sg--Skyberg silt loam, 0 to 3 percent slopes

Skyberg

Extent: 85 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 3 percent

Parent material: silty sediments over loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 12 in	silt loam	moderate	2.60 to 2.83 in	5.6 to 6.5
Bt1 --	12 to 24 in	silt loam	moderate	2.20 to 2.44 in	4.5 to 5.5
2Bt2 --	24 to 48 in	loam	moderately slow	3.36 to 4.56 in	5.1 to 7.3
2C --	48 to 60 in	loam	moderately slow	1.06 to 1.54 in	7.4 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Ta--Tama and Downs silt loams, 0 to 1 percent slopes

Tama

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 0 to 1 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,BA -- 0 to 17 in	silt loam	moderate	3.72 to 4.06 in	5.1 to 7.3
Bt -- 17 to 38 in	silty clay loam	moderate	3.76 to 4.17 in	5.1 to 6.5
C -- 38 to 60 in	silt loam	moderate	3.97 to 4.41 in	5.6 to 7.3

Downs

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 0 to 1 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.90 to 2.08 in	5.1 to 7.3
E,BE -- 9 to 16 in	silt loam	moderate	1.28 to 1.42 in	5.1 to 6.0
Bt -- 16 to 45 in	silty clay loam	moderate	5.17 to 5.75 in	4.5 to 7.3
C -- 45 to 60 in	silt loam	moderate	2.69 to 2.99 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Tb--Tama and Downs silt loams, 2 to 6 percent slopes

Tama

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,BA -- 0 to 17 in	silt loam	moderate	3.72 to 4.06 in	5.1 to 7.3
Bt -- 17 to 38 in	silty clay loam	moderate	3.76 to 4.17 in	5.1 to 6.5
C -- 38 to 60 in	silt loam	moderate	3.97 to 4.41 in	5.6 to 7.3

Downs

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 2 to 6 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.90 to 2.08 in	5.1 to 7.3
E,BE -- 9 to 16 in	silt loam	moderate	1.28 to 1.42 in	5.1 to 6.0
Bt -- 16 to 45 in	silty clay loam	moderate	5.17 to 5.75 in	4.5 to 7.3
C -- 45 to 60 in	silt loam	moderate	2.69 to 2.99 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Te--Tama and Downs silt loams, 7 to 11 percent slopes, moderately eroded

Tama, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 7 to 11 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.1 to 7.3
Bt -- 10 to 35 in	silty clay loam	moderate	4.54 to 5.04 in	5.1 to 6.5
C -- 35 to 60 in	silt loam	moderate	4.46 to 4.96 in	5.6 to 7.3

Downs, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 7 to 11 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.90 to 2.08 in	5.1 to 7.3
E, BE -- 9 to 16 in	silt loam	moderate	1.28 to 1.42 in	5.1 to 6.0
Bt -- 16 to 45 in	silty clay loam	moderate	5.17 to 5.75 in	4.5 to 7.3
C -- 45 to 60 in	silt loam	moderate	2.69 to 2.99 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Tg--Tama and Downs silt loams, 12 to 17 percent slopes, moderately eroded

Tama, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 12 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.1 to 7.3
Bt --	10 to 35 in	silty clay loam	moderate	4.54 to 5.04 in	5.1 to 6.5
C --	35 to 60 in	silt loam	moderate	4.46 to 4.96 in	5.6 to 7.3

Downs, moderately eroded

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 12 to 17 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam	moderate	2.07 to 2.26 in	5.1 to 7.3
Bt --	10 to 35 in	silty clay loam	moderate	4.54 to 5.04 in	4.5 to 7.3
C --	35 to 60 in	silt loam	moderate	4.46 to 4.96 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

Tk--Tama and Downs silt loams, 18 to 35 percent slopes

Tama

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 18 to 35 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.1 to 7.3
Bt --	10 to 35 in	silty clay loam	moderate	4.54 to 5.04 in	5.1 to 6.5
C --	35 to 60 in	silt loam	moderate	4.46 to 4.96 in	5.6 to 7.3

Downs

Extent: 45 percent of the unit

Landform(s): loess hills

Slope gradient: 18 to 30 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	silt loam	moderate	2.07 to 2.26 in	5.1 to 7.3
Bt --	10 to 35 in	silty clay loam	moderate	4.54 to 5.04 in	4.5 to 7.3
C --	35 to 60 in	silt loam	moderate	4.46 to 4.96 in	5.6 to 7.3

Map Unit Description (MN)

Fillmore County, Minnesota

TI--Mantorville and Wykoff loams, 0 to 1 percent slopes

Mantorville

Extent: 45 percent of the unit

Landform(s): terraces, till plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	loam	moderate	1.97 to 2.17 in	5.1 to 7.3
Bw1 --	10 to 25 in	loam	moderate	2.30 to 2.92 in	5.1 to 7.3
2Bw2 --	25 to 40 in	gravelly loamy coarse sand	moderately rapid	0.30 to 2.09 in	5.1 to 7.3
2C --	40 to 60 in	gravelly coarse sand	rapid	0.39 to 1.97 in	5.1 to 7.8

Wykoff

Extent: 45 percent of the unit

Landform(s): terraces, till plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam	moderate	1.54 to 2.08 in	5.6 to 7.3
Bt1 --	9 to 15 in	loam	moderate	0.77 to 1.12 in	5.1 to 6.5
Bt2 --	15 to 23 in	gravelly loam	moderate	0.87 to 1.50 in	5.1 to 6.5
BC --	23 to 30 in	gravelly sandy loam	moderate	0.57 to 1.28 in	5.1 to 6.5
C --	30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Tm--Mantorville and Wykoff loams, 2 to 6 percent slopes

Mantorville

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	loam	moderate	1.97 to 2.17 in	5.1 to 7.3
Bw1 --	10 to 25 in	loam	moderate	2.30 to 2.92 in	5.1 to 7.3
2Bw2 --	25 to 40 in	gravelly loamy coarse sand	moderately rapid	0.30 to 2.09 in	5.1 to 7.3
2C --	40 to 60 in	gravelly coarse sand	rapid	0.39 to 1.97 in	5.1 to 7.8

Wykoff

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam	moderate	1.54 to 2.08 in	5.6 to 7.3
Bt1 --	9 to 15 in	loam	moderate	0.77 to 1.12 in	5.1 to 6.5
Bt2 --	15 to 23 in	gravelly loam	moderate	0.87 to 1.50 in	5.1 to 6.5
BC --	23 to 30 in	gravelly sandy loam	moderate	0.57 to 1.28 in	5.1 to 6.5
C --	30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Tn--Mantorville and Wykoff loams, 7 to 17 percent slopes, moderately eroded

Mantorville, moderately eroded

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 17 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	5.1 to 7.3
Bw1 -- 10 to 25 in	loam	moderate	2.30 to 2.92 in	5.1 to 7.3
2Bw2 -- 25 to 40 in	gravelly loamy coarse sand	moderately rapid	0.30 to 2.09 in	5.1 to 7.3
2C -- 40 to 60 in	gravelly coarse sand	rapid	0.39 to 1.97 in	5.1 to 7.8

Wykoff, moderately eroded

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 17 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.54 to 2.08 in	5.6 to 7.3
Bt1 -- 9 to 15 in	loam	moderate	0.77 to 1.12 in	5.1 to 6.5
Bt2 -- 15 to 23 in	gravelly loam	moderate	0.87 to 1.50 in	5.1 to 6.5
BC -- 23 to 30 in	gravelly sandy loam	moderate	0.57 to 1.28 in	5.1 to 6.5
C -- 30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

To--Mantorville and Wykoff sandy loams, 0 to 1 percent slopes

Mantorville

Extent: 45 percent of the unit

Landform(s): terraces, till plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 1.06 in	5.1 to 6.5
2Bw -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.87 in	5.1 to 6.5
2C -- 17 to 60 in	gravelly sand	rapid	0.86 to 1.72 in	5.6 to 6.5

Wykoff

Extent: 45 percent of the unit

Landform(s): terraces, till plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 0.92 in	5.1 to 7.3
Bt1 -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.18 in	4.5 to 6.0
Bt2 -- 17 to 30 in	gravelly loamy sand	very rapid	0.26 to 0.52 in	4.5 to 6.0
C -- 30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Tp--Mantorville and Wykoff sandy loams, 2 to 6 percent slopes

Mantorville

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 1.06 in	5.1 to 6.5
2Bw -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.87 in	5.1 to 6.5
2C -- 17 to 60 in	gravelly sand	rapid	0.86 to 1.72 in	5.6 to 6.5

Wykoff

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 0.92 in	5.1 to 7.3
Bt1 -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.18 in	4.5 to 6.0
Bt2 -- 17 to 30 in	gravelly loamy sand	very rapid	0.26 to 0.52 in	4.5 to 6.0
C -- 30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

Tr--Mantorville and Wykoff sandy loams, 7 to 11 percent slopes, moderately eroded

Mantorville, moderately eroded

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 11 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 1.06 in	5.1 to 6.5
2Bw -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.87 in	5.1 to 6.5
2C -- 17 to 60 in	gravelly sand	rapid	0.86 to 1.72 in	5.6 to 6.5

Wykoff, moderately eroded

Extent: 45 percent of the unit

Landform(s): till plains

Slope gradient: 7 to 11 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.78 to 0.92 in	5.1 to 7.3
Bt1 -- 7 to 17 in	sandy loam	moderately rapid	0.98 to 1.18 in	4.5 to 6.0
Bt2 -- 17 to 30 in	gravelly loamy sand	very rapid	0.26 to 0.52 in	4.5 to 6.0
C -- 30 to 60 in	sand	moderate	2.39 to 5.39 in	5.6 to 6.5

Map Unit Description (MN)

Fillmore County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Wa--Waukegan silt loam, 0 to 1 percent slopes

Waukegan

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 1 percent

Parent material: silty eolian deposits and/or outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Ap --	0 to 15 in	silt loam	moderate	3.29 to 3.59 in	5.6 to 7.3
Bw --	15 to 40 in	silt loam	moderate	5.04 to 5.54 in	5.1 to 7.3
2C --	40 to 60 in	gravelly coarse sand	rapid	0.39 to 0.79 in	5.6 to 7.8

Map Unit Description (MN)

Fillmore County, Minnesota

Wb--Waukegan silt loam, 2 to 6 percent slopes

Waukegan

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 6 percent

Parent material: silty eolian deposits and/or outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 15 in	silt loam		moderate	3.29 to 3.59 in	5.6 to 7.3
Bw --	15 to 40 in	silt loam		moderate	5.04 to 5.54 in	5.1 to 7.3
2C --	40 to 60 in	gravelly coarse sand		rapid	0.39 to 0.79 in	5.6 to 7.8

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.